REMARKS/ARGUMENTS

This response responds to the office action dated January 19, 2006.

The Examiner rejected claims 1-22 and 24 under 35 U.S.C. § 102(e) as being anticipated by Zeng et al., U.S. Patent No. 6,505,299. In a prior response, applicant amended the claims in a manner that applicant argued distinguished each rejected claim over the cited prior art. Specifically, applicant amended each claim to recite the limitation of transposing coefficients in a direction limited to one orthogonal to an axis of packetization of the coefficients. The applicant argued that Zeng failed neither disclosed nor suggested this limitation. The Examiner presently contends that applicant's argument is not persuasive, and that the added limitation is in fact disclosed by Zeng. However, as will be explained in more detail below, the passage cited by the Examiner as purportedly disclosing the limitation, added by applicant in the prior amendment, fails to disclose even the preliminary step of transposing one coefficient with another, let alone doing so in a direction orthogonal to an axis of packetization.

Independent claims 1 and 8 recite the limitations of "selectively transposing at least one transform coefficient with a said transform coefficient from a different array, transposition of coefficients limited to a direction along an axis orthogonal to said axis of packetization." Similarly, independent claims 15, 21, 22, and 24 each recite the limitations of transposing coefficients of one array with coefficients of other array, in a direction along a first axis, and then packetizing the coefficients in a direction along a second axis orthogonal to the first axis. The Examiner contends that these respective limitations are disclosed at col. 8 lines 36-43 of the cited prior art, which states "that the *block rotator* selects a 90 degree orientation to the axis of packetization." (emphasis added). First, the block *rotator* of Zeng does not *transpose* coefficients from one array with those of another array. Instead, the rotator simply rotates *blocks* of coefficients and *does so within each array*. Thus, the respective limitations at issue each distinguish over the block rotator of Zeng in two respects. First, the block rotator of Zeng fails to change the position of a coefficient relative to another (i.e. transposition of one coefficient with another); the rotation of a block does not switch the position of *any* coefficient with

respect to another coefficient. Second, the block rotator simply rotates blocks, each within its own array, hence does nothing between different arrays.

In fact, none of the passages cited by the Examiner to support the rejection discloses the limitation of transposing one coefficient with another coefficient in a different array, and in a direction limited to one orthogonal to an axis of packetization. For example, the Examiner cites Fig. 8 of Zeng, along with the accompanying portions of the specification at col. 7 lines 13-37. That figure shows a slice 94 of DCT coefficients where each "block" in the slice includes 64 DCT coefficients, and where the axis of packetization is horizontal, along the length of the slice. This figure, however, merely discloses the conceptual rearrangement of the DCT coefficients within the slice into columns having a common sub-band. This rearrangement does not yet *transpose* any coefficient with another; it merely arranges them in a convenient manner for *later* transposition, i.e. shuffling, according to the various embodiments of FIG 9. The reason for the sub-band arrangement is that Zeng discloses that shuffling of coefficients constrained within the same sub-bands shown in Figure 8 maximizes compression efficiency when the coefficients are later encoded. However, as previously noted by the applicant in a prior response, shuffling within a sub-band, and more importantly the specific methods of shuffling disclosed by Zeng in FIG. 9, transpose many of the coefficients in a direction along, i.e not orthogonal to, the direction of packetization.

For example, in the constrained, shuffled sub-band method of FIG. 9, only the coefficients O, P, U, and V were moved to a different array and along a direction only orthogonal to an axis of packetization. Similarly, in the unconstrained shuffled sub-band method of FIG. 9, only coefficients D, F, and Q were moved to a different array and along a direction only orthogonal to an axis of packetization. Similarly, the coefficient rotator (a coefficient rotator does shuffle coefficients, as opposed to a block rotator) of FIG 9 shows only coefficients L, K, N, and M in the rotators 110, 112, and 114, and no coefficients at all in rotator 116 being moved to a different array and along a direction only orthogonal to an axis of packetization. Thus, none of Zeng's shuffling methods, which is the only step of Zeng relevant to the limitation at hand, limit shuffling (transposition) to a direction along an axis orthogonal to an axis of packetization.

The applicant notes that the remaining portions of the disclosure of Zeng cited by the Examiner also fail to disclose the respective limitations previously discussed. For example, though Zeng discloses shuffling transform coefficients at col. 3 lines 24-36, the reference fails to disclose doing so in a direction limited to an axis orthogonal to a direction of packetization. Similarly, the disclosure at col. 4 lines 39-50 of Zeng merely recited certain definitions and the disclosure at col. 5 lines 16-51 discussing FIG. 3 merely pertains to the arrangement of coefficients within a block, as opposed to transposing coefficients from one block to another block in a different array. Thus, contrary to the Examiner's position, Zeng fails to disclose all limitations present in each of the rejected claims 1-22 and 24.

In view of the foregoing remarks, the applicant respectfully requests reconsideration and allowance of claims 1-22 and 24.

Respectfully submitted,

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